CLAIMS

What is claimed is:

1.   A method of focusing on at least one of input items in an object picture embedded in a markup picture, the method comprising:

interpreting an object program for the object picture to generate input item map information necessary for focusing on the input items; and

focusing on one of the input items with reference to the input item map information in response to a key input from a user input device.

2.   The method of claim 1, wherein the object program has an independent program structure according to an extensible markup language (XML) document and a Java program.

3.   The method of claim 1, wherein the object program interpreting comprises:

obtaining information on input types of the input items, information on positions of the input items, and information on identifications of the input items from the object program; and

generating the input item map information based on the information on the input item types, the input item position information, and the input item identification information.

4.   The method of claim 3, wherein the focusing comprises moving a focus from a currently focused input item to an input item nearest to a direction indicated by a direction key of the user input device based on the input item type information, the input item position information, and the input item identification information.

5.   A method of focusing on at least one of input items in an object picture embedded in a markup picture, the method comprising:

transmitting a message from a markup interpretation engine for the markup picture to an object interpretation engine for the object picture for moving an input item focus, in response to a pressed key of a user input device to move the focus; and

focusing by the object interpretation engine on one of the object picture input items according to a predetermined order in response to the message.

6.   A method of focusing on at least one of input items in an object picture embedded in a markup picture, the method comprising:

transmitting a message from an object interpretation engine for the object picture to a markup interpretation engine for the markup picture for moving an input item focus, in response to a pressed key of a user input device to move the focus; and

focusing by the markup interpretation engine on one of the markup picture input items according to a predetermined order in response to the message.

7.   The method of claim 5, wherein the message transmission comprises transmitting information on a position of a currently focused markup picture input item and information on a direction along which the focus moves.

8.   The method of claim 7, wherein the focusing comprises:

moving the focus from the currently focused markup picture input item to a next object picture input item positioned in an object picture direction selected based on the direction information.

9.   The method of claim 5, wherein the focusing comprises:

moving the focus from the currently focused markup picture input item to a next object picture input item determined with reference to a distance and a direction angle of each markup picture and object picture input item.

10.   An information storage medium storing information controlling an interactive contents playback apparatus, the storage medium comprising:

a markup document written in markup language; and

an object program to display an object picture having at least one input item and embedded in a markup picture formed by the markup document, the object program containing information on an input item type, information on a position of an input item, and information on an identification of an input item necessary for generating input item map information.

11.   The information storage medium of claim 10, further comprising at least one of audio contents reproduced and image contents displayed by the object program while being embedded in the markup picture.

12.   The information storage medium of claim 10, wherein the object program has an independent program structure according to an extensible markup language (XML) document and a Java program.

13.   An information storage medium storing information controlling an interactive contents playback apparatus, the storage medium comprising:

a markup document written in markup language;

an object program to display an object picture having at least one or more input items and embedded in a markup picture having at least one or more input items and formed by the markup document ; and

a focus change program controlling transmitting a message for moving a focus on one of the object picture input items from an object interpretation engine for the object picture to a markup interpretation engine for the markup picture, in response to a pressed key of a user input device to move the object picture focus, and focusing on one of the markup picture input items according to a predetermined order in response to the message using the markup interpretation engine.

14.   The information storage medium of claim 13, wherein the message comprises information on a position of a currently focused object picture input item and information on a direction along which the focus moves.

15.   The information storage medium of claim 13, wherein the focus change program controls moving the focus from a currently focused object picture input item to a next markup picture input item positioned in a markup picture direction selected based on the message transmitted from the object interpretation engine.

16.   The information storage medium of claim 13, wherein the focus change program controls moving the focus from a currently focused object picture input item to a next focused markup picture input item determined with reference to a distance and a direction angle of each object picture and markup picture input item.

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17.   An markup picture display system, comprising:

a display;

a non-pointer type input device; and

a programmed computer processor processing a markup document to generate on the display a markup picture having at least one input item and the markup picture including an embedded object picture having at least one input item; and moving an input item focus among the markup picture input items and the object picture input items according to a predetermined order, in response to an input by the non-pointer type input device.

18.   The system of claim 17, further comprising a digital video disc (DVD) storing the markup document and a DVD video as the object picture embedded in the markup picture, wherein:

the display is a television;

the programmed computer processor is a DVD player processing the markup document stored on the DVD disc; and

the non-pointer type input device is a remote control of the DVD player.

19.   The system of claim 17, wherein as the programmed processor an object interpretation engine, which processes the markup document, and a markup interpretation engine, which processes an object program to display the object picture embedded in the markup picture, exchange messages to control the input item focus movement among the object picture and markup picture input items, in response to a key input of the non-pointer type input device.

20.   The system of claim 19, wherein the message comprises information on a position of a currently focused object picture or markup picture input item and direction information along which the focus moves.

21. An interactive DVD content player, comprising:

a non-pointer type input device; and

a programmed computer processor processing a markup document to generate a markup picture having at least one input item and the markup picture including an embedded DVD object picture having at least one input item; and moving an input item focus among the markup picture input items and the DVD object picture input items according to a predetermined order, in response to an input by the non-pointer type input device.

22. An interactive contents playback apparatus, comprising:

a non-pointer type input device;

a reader reading interactive contents including an object program; and

a presentation engine processing the interactive contents, including the object program, to generate an interactive picture having at least one input item, the interactive picture including an embedded object picture based upon the object program and having at least one input item; and moving an input item focus among the interactive picture input items and the object picture input items according to a predetermined order, in response to a user input by the non-pointer type input device.

23. The apparatus of claim 22, wherein the interactive contents is a markup document, and the presentation engine comprises:

a markup interpretation engine interpreting the markup document to generate a markup picture as the interactive picture and to generate a markup picture input item map for focusing on the markup picture input items;

an object interpretation engine interpreting the object program to embed the object picture in the interactive picture and to generate an object picture input item map for focusing on the objection picture input items; and

a user input controller storing the markup picture and the object picture input item maps and moving the input item focus among the markup picture input items and the object picture input items according to the markup picture and the object picture input item maps.

24. The apparatus of claim 22, wherein the non-pointer type input device is a remote control comprising four direction keys moving the input item focus in up, right, down, and left directions, and the presentation manager moves the input item focus from an interactive picture input item to an object picture input item in response to one of the direction keys in a direction of the object picture leaving the interactive picture.

25. The apparatus of claim 22, wherein the non-pointer type input device is a remote control comprising four direction keys moving the input item focus in up, right, down, and left directions, and the presentation manager moves the input item focus upward or downward through the interactive picture input items and the object picture input items in response to the up or the down key, respectively, by searching for a next input item with reference to a distance and direction angles of each input item.